REMARKS

Claims 20 through 26 and 43 are pending in this application. Withdrawn claims 27 through 36 are cancelled without prejudice or disclaimer. New claim 43 is added herein. Support for new claim 43 may be found in claim 20 as filed originally and at page 7, line 2 of the WO/00/38838 publication. Further reconsideration of this application in view of the foregoing amendments and the following remarks is respectfully requested.

Response to Arguments:

Consideration of the Applicant's arguments is appreciated. The specification does define "known" in terms that would be understood by those skilled in the art, contrary to the assertion in the final Office action, at inter alia page 7, lines 2-4, and at page 32, lines 2 and 3 of the WO/00/38838 publication. Furthermore, one method of achieving a known volume of reagent is described at page 28, lines 6-20. Furthermore, since the volume of a well is known, the volume of reagent necessary to fill a well will be known. This is to be contrasted with Atwood in which about one drop of reagent 13, rather than a known volume as recited in claim 20, is sealed into the volume between the cover member 16 and the slide 14 by a compliant seal member or gasket around its perimeter.

Furthermore, even if one knows they deposited about one drop on a slide, as discussed in the final Office action, they have no idea how much volume is contained in that drop, hence the use of the word "about". The adjective "known" modifies "volume" in claim 20. Simple awareness of the presence of a drop of reagent does not amount to knowledge of the *volume* of that drop.

Furthermore, since the cover member of Atwood is compliant, the volume of reagent trapped by the cover member will not be *known*, whether or not Atwood describes the concavity as being chosen to define the volume of reagent or not. In other words, the concavity is doing the defining, and the concavity is variable, since the cover member is compliant, so Atwood has no real idea what that volume ends up being, contrary to the assertion at page 5 of the final Office action.

Furthermore, even if a pipet set delivers a desired reagent volume, some will spill out, and there's no real way to know in Atwood how much ends up being trapped under the coverslip, contrary to the assertion at page 5 of the final Office action, since the cover itself is

compliant.

Furthermore, even if the volume is fixed in Atwood, it's still not known, contrary to the assertion at page 5 of the final Office action, since the cover itself is compliant.

Furthermore, the cover is compliant, that fact has been established, whatever the purpose of the compliance. Since the clover is compliant, the volume enclosed by the cover is necessarily defined by the compliance. Since the volume depends on the compliance, it is not known.

Finally, claim 20 recites a known volume. Since spilling an unknown volume in Atwood renders the volume of the remaining, unspilled portion unknown, claim 20 does define the invention over Atwood.

Claim Rejections - 35 U.S.C. § 102:

Claims 20, 22, 23, 25, and 27 were rejected under 35 U.S.C. § 102(b) as anticipated by Atwood et al., US 5,364,790. The rejection is traversed.

Claim 20 recites, in pertinent part:

"a portion of said coverslip is concave thereby enclosing a known volume when placed onto a microscope slide."

Atwood neither teaches, discloses, nor suggests a concave coverslip enclosing a *known* volume when placed onto a microscope slide. In Atwood, rather, a thin, generally compliant cover member 16 is placed over sample 12, as described at column 6, lines 15 and 16, column 7, lines 38 and 39, and as shown in Fig. 1. Thus, cover member 16 deforms to accommodate whatever volume of reagent happens to have been stuffed underneath, rather than enclosing a known volume as recited in claim 20.

Furthermore, in Atwood, about one drop of reagent 13, rather than a known volume as recited in claim 20, is sealed into the volume between the cover member 16 and the slide 14 by a compliant seal member or gasket around its perimeter, as described at column 7, lines 47 through 49. Thus, compliant cover member 16 stretches to accommodate a variable volume of reagent rather than enclosing a known volume as recited in claim 20.

Furthermore, Atwood notes that typically, for a circular cover about 12 mm in diameter, about 10 microliters will be contained between the cover and the slide, as described at column 8, lines 2 and 3, rather than a known volume as recited in claim 20.

Furthermore, in Atwood, the volume of reagent is chosen to be slightly larger than the volume between the concave surface of the cover 16 and a plane touching its rim 19 (the slide surface), as described at column 11, lines 59 through 62, rather than a known volume as recited in claim 20. A droplet 13 reaches and passes over the edge of rim 19 just before slide surface makes contact with the rim 19, as described at column 11, lines 63 through 65, expelling all, or nearly all the air from under cover 16.

Thus the precise volume of air will not be known, so neither will the volume of reagent left after the air is expelled, in contrast to claim 20 in which a known volume is enclosed by the coverslip. It is acceptable for a small excess volume of the reagent to spill out past the rim 19 of the cover 16, as described at column 11, lines 67 and 68. The amount of excess volume that is spilled is unknown, so there is no way to know how much reagent is left underneath the coverslip, in contrast to claim 20 in which a known volume is enclosed by the coverslip.

Finally, in Atwood, the cover itself is compliant so that it can expand to accommodate the fixed reagent volume without a large increase in pressure, as described at column 12, lines 24 through 26. Thus, the cover slip deforms to accommodate whatever volume of reagent happens to have been left underneath, rather than enclosing a known volume as recited in claim 20. Claim 20 is submitted to be allowable. Withdrawal of the rejection of claim 20 is earnestly solicited.

Claims 22, 23, 25, and 27 depend from claim 20 and add further distinguishing elements. Claims 22, 23, 25, and 27 are thus also submitted to be allowable. Withdrawal of the rejection of claims 22, 23, 25, and 27 is also earnestly solicited.

Claim Rejections - 35 U.S.C. § 103:

Claims 21 and 26 have been rejected under 35 U.S.C. § 103 as being unpatentable over Atwood in view of the Pan et al. WO 97/07241. The rejection is traversed. Reconsideration is earnestly solicited.

Claims 21 and 26 depend from claim 20 and add further distinguishing elements. Atwood neither teaches, discloses, nor suggests a concave coverslip enclosing a known volume when placed onto a microscope slide, as discussed above with respect to claim 20. Pan does not, either. Claims 21 and 26 are thus also submitted to be allowable. Withdrawal of the rejection of claims 21 and 26 is also earnestly solicited.

Claim 24 has been rejected under 35 U.S.C. § 103 as being unpatentable over Atwood in view of the Kuan et al. US 6,181,811. The rejection is traversed. Reconsideration is earnestly solicited.

Claim 24 depends from claim 20 and add further distinguishing elements. Atwood neither teaches, discloses, nor suggests a concave coverslip enclosing a known volume when placed onto a microscope slide, as discussed above with respect to claim 20. Kuan does not, either. Claim 24 is thus also submitted to be allowable. Withdrawal of the rejection of claim 24 is also earnestly solicited.

New claim 43:

None of the cited references teaches, discloses, or suggests a concave coverslip enclosing a *constant* volume when placed onto a microscope slide, as recited in claim 43. Claim 43 is thus also submitted to be allowable.

Conclusion:

Accordingly, in view of the reasons given above, it is submitted that all claims 20 through 26 and 43 are allowable over the cited references. Allowance of all claims 20 through 26 and 43 and of this entire application are therefore respectfully requested.

Respectfully submitted,

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